

5 W H A T I S C L A I M E D I S :

1. A recording medium driving apparatus, comprising:

a rotation driving means for rotably driving a recording medium;

a recording/reproducing means for recording/reproducing data to/from the recording medium;

10 a transmission driving means for relatively driving the recording/reproducing means with respect to the recording medium;

a tray means for carrying the rotation driving means, the recording/reproducing means and the transmission driving means, and capable of inserting to and ejecting from a casing;

15 a lock means, having an electromagnetic driving means, wherein under an insertion state of the tray means, the tray means is engaged with the casing and the tray means is maintained at a non-ejectable state, and when the electromagnetic driving means is in a driving state, the tray means is disengaged with the casing and the tray means becomes ejectable;

20 an eject means, for moving the tray means from an insertion position to an eject position by releasing an engagement between the tray means and the casing;

a controller, for selectively outputting operation instructions and non-operation instructions to the rotation driving means, the transmission driving means and the electromagnetic driving means respectively;

25 a detection means, for detecting an eject state of the tray means;

a first disable circuit, for disabling an operation of the electromagnetic driving means regardless of instructions from the controller, according to a detection signal from the detection means; and

5 a second disable circuit, for disabling operations of the rotation driving means and
the transmission driving means regardless of the instructions from the controller,
according to the detection signal from the detection means,

 wherein the first and the second disable circuits comprise a single mute signal
generator for outputting a mute signal according to the detection signal from the
10 detection means, so as to disable the operations of the rotation driving means and the
transmission driving means.

 2. The recording medium driving apparatus of claim 1, wherein the tray means
carries the electromagnetic driving means.

 3. The recording medium driving apparatus of claim 1 or claim 2, wherein drivers
15 for respectively driving the electromagnetic driving means, the rotation driving means
and the transmission driving means are integrated as a driver IC, and the single mute
signal generator is integrated into the driver IC.